What is claimed is:

1. A platform, comprising:

a) a surface;

b) a coating film;

c) a channel structure;

wherein said coating film defines in part said channel structure;

wherein said platform comprises a microchip;

wherein said coating film comprises a particle.

2. The platform of claim 1, wherein said surface comprises at least in part silica, glass, quartz, fused silica, polymer, plastic, metal, metal oxide, PTFE, polysilicon, silicon nitride, ceramic, composit or carbon.

3. The platform of claim 1, wherein said surface comprises a magnetic element, an electromagnetic element, an acoustic element or a dielectric element.

4. The platform of claim 1, wherein said surface is between about 10 micrometers and about 20 centimeters in length or width.

5. The platform of claim 1, wherein said surface is between about 0.1 micrometers and about 10 centimeters in thickness.

6. The platform of claim 1, wherein said coating film comprises a polymer, homopolymer, copolymer, cross-linked polymer, partially polymerized polymer or a cross-linked polymer network.

7. The platform of claim 1, wherein said coating film comprises a hydrophobic polymer or a hydrophilic polymer.

8. The platform of claim 1, wherein said coating film comprises at least in part polyethyleneglycol, polyurethanes, polyacrylates, polyacrylamides, polymethylacrylamide, polyvinyl alcohol, polyvinylpyrrolidone, polyamino acids, polysaccharides and polysiloxanes.

9. The platform of claim 1, wherein said coating film is biocompatable.

10. The platform of claim 1, wherein said coating film is between about 10 micrometers and about 20 centimeters in length or width.

11. The platform of claim 1, wherein said coating film is between about 0.1 micrometers and about 10 millimeters in thickness.

12. The platform of claim 1, wherein said coating film comprises at least in part a biological group.

13. The platform of claim 12, wherein said biological group comprises at least in part a biomolecule, polypeptide, antibody, receptor, protein, nucleic acid, small molecule, carbohydrate, lipid or combinations thereof.

14. The platform of claim 12, wherein said biological group interacts with a biological moiety or chemical moiety by electrostatic interactions, ionic interactions, hydrogen bonding or hydrophobic interactions.

15. The platform of claim 12, wherein said biological group interacts with a biological moiety by nucleic acid - nucleic acid interactions, nucleic acid - protein interactions, antigen - antibody interactions, receptor - ligand interactions or protein - small molecule interactions.

16. The platform of claim 12, wherein said biological group is present substantially throughout said coating film or on the surface of said coating film.

17. The platform of claim 1, wherein said coating film comprises at least in part a chemical group.

18. The platform of claim 17, wherein said chemical group comprises at least in part an alkyl group, a charged group, a positively charged group, a negatively charged group, small molecules or combinations thereof.

19. The platform of claim 17, wherein said chemical group interacts with a chemical moiety or biological moiety by electrostatic interactions, ionic interactions, hydrogen bonding, hydrophobic interactions or covalent linking.

20. The platform of claim 17, wherein said chemical group is present substantially throughout said coating film or on the surface of said coating film.

21. The platform of claim 1, wherein said particle is imbedded within said coating film.

22. The platform of claim 21, wherein said particles comprise between about 0.1% and about 99.9% volume/ volume of said polymer coating.

23. The platform of claim 21, wherein said particles comprise at least in part glass, silica, quartz, fused silica, polymer, metal oxide, polystyrene, PMMA, plastic, polysaccharides or polyimide.

24. The platform of claim 21, wherein said particle size, on average, is between about 0.05 micrometers and about 500 micrometers.

25. The platform of claim 21, wherein said particles are biocompatable.

26. The platform of claim 21, wherein said particles comprises at least in part a biological group.

27. The platform of claim 21, wherein said particles comprises at least in part a chemical group.

28. The platform of claim 1, wherein said channel structure comprises open channels or closed channels.

29. The platform of claim 1, wherein at least a portion of said channel structure is defined by said surface or a covering structure.

30. The platform of claim 1, wherein at least a portion of said channel structure is defined by said coating film.

31. The platform of claim 1, wherein at least a portion of said channel structure is defined by selective polymerization of said coating film.

32. The platform of claim 1, wherein said channel structures forms at least one island.

33. The platform of claim 1, wherein said channel structure has a shape in cross section that is substantially square, oval, crescent, half-circle or rectangular.

34. The platform of claim 1, wherein said channel structure is linear, circular, coiled, curved, saw-toothed or switchback along at least a portion of its length.

35. The platform of claim 1, further comprising a magnetic element, an electromagnetic element, an acoustic element or a dielectric element.

36. A method of making a platform that comprises at least one channel structure, comprising:

a) providing a surface;

b) contacting said surface with a polymerizable composition comprising:

1. unpolymerized polymer subunits;

2. at least one polymerization initiator;

c) selectively polymerizing said polymerizable composition at loci to form a platform that comprises a polymerized layer that defines at least in part at least one channel structure.

37. The method of claim 36, wherein said surface comprises at least in part silica, glass, quartz, fused silica, polymer, plastic, metal, metal oxide, PTFE, polysilicon, silicon nitride, ceramic, composit or carbon.

38. The method of claim 36, wherein said surface comprises a magnetic element, an electromagnetic element, an acoustic element or a dielectric element.

39. The method of claim 36, wherein said unpolymerized polymer subunits comprise monomers, macromonomers or combinations thereof.

40. The method of claim 36, wherein said unpolymerized polymer subunits comprise partially polymerized polymer.

41. The method of claim 36, wherein said unpolymerized polymer subunits polymerize to form a homopolymer, copolymer, cross-linked polymer or a cross-linked polymer network

42. The method of claim 36, wherein said unpolymerized polymer subunits polymerize to form a hydrophobic polymer or a hydrophilic polymer.

43. The method of claim 36, wherein said unpolymerized polymer subunits are biocompatable.

44. The method of claim 36, wherein said unpolymerized polymer subunits comprise subunits of at least one polymer selected from the group consisting of acrylic, methacrylic, vinylbenzyl, vinyl, epoxy, polymers comprising pendant alpha,beta unsaturated ketones, polymers comprising pendant chalione moieties and polymers comprising cinnamates.

45. The method of claim 36, wherein said polymerization initiator comprises a photointiator or a thermal initiator.

46. The method of claim 38, wherein said photoinitiator is selected from the group consisting of 2,2-dimethoxy-2-phenyl acetophenone, benzophenone, anthraquinone, diethoxyacetophenone, p-dimethylaminoacetophenone, mono-acylphosphineoxides, bis-acylphosphineoxides, bis(2,4,6-trimethylbenzoly)-phenylphosphine oxide and 1-[4-(2-hydroxyethoxy)-phenyl]-2-hydroxy-2-methyl-1-propane-1-one.

47. The method of claim 36, wherein said polymerization initiator is provided at a concentration of between about 0.1% and about 10% weight / volume.

48. The method of claim 36, wherein said selectively polymerizing comprises localized initiation of said at least one polymerization initiator.

49. The method of claim 48, wherein said localized initiation comprises localizing electromagnetic radiation, UV light or laser light.

50. The method of claim 49, wherein said electromagnetic radiation is of a wavelength between about 180 nanometers and about 600 nanometers.

51. The method of claim 49, wherein said electromagnetic radiation is localized using a masking.

52. The method of claim 51, wherein said masking comprises a photomask, printed transparancy film, transparent areas or windows.

53. The method of claim 36, wherein said polymerizable composition comprises at least in part a biological group.

54. The method of claim 53, wherein said biological group is present substantially throughout said coating film or on the surface of said coating film.

55. The method of claim 36, wherein said polymerizable composition comprises at least in part a chemical group.

56. The method of claim 55, wherein said chemical group is present substantially throughout said coating film or on the surface of said coating film.

57. The method of claim 36, wherein said polymerizable composition comprises a polymerizing functional group.

58. The method of claim 57, wherein said polymerizing functional group can form a bond with a polymer, a monomer or a particle.

59. The method of claim 57, wherein said polymerizing functional group is selected from the group consisting of acrylics, methacrylics, vinylbenzyls, vinyls, epoxies, alpha/beta usaturated ketones, cinnamates, chalione groups.

60. The method of claim 36, wherein said polymerized layer comprises a biological group or a chemical group.

61. The method of claim 60, wherein said biological groups or chemical groups result from selective polymerization.

62. The method of claim 60, wherein said biological groups or chemical groups result from modification of at least a portion of said polymerized layer.

63. The method of claim 60, wherein said biological groups or chemical groups result from coating of at least a portion of said polymerized layer.

64. The method of claim 60, wherein said polymerized layer comprises a polymer selected from the group consisting of polyethyleneglycol, polyurethanes, polyacrylates, polyacrylamides, polymethylacrylamide, polyvinyl alcohol, polyvinyl prolidone, polyamino acids, polysaccharides and polysiloxanes.

65. The method of claim 60, wherein said biological groups or said chemical groups are throughout the polymerized layer on the surface of aid polymerized layer.

66. The method of claim 36, wherein said polymerizable composition or coating film further comprises particles.

67. The method of claim 66, wherein said particles comprise between about 0.1% and about 99.9% volume/ volume of said coating film.

68. The method of claim 66, wherein said particles comprise at least in part glass, silica, quartz, fused silica, polymer, metal oxide, polystyrene, PMMA, plastic, polysaccharide or polyamide.

69. The method of claim 66, wherein said particle size, on average, is between about 0.1 micrometer and about 50 micrometers.

70. The method of claim 66, wherein said particles are biocompatable.

71. The method of claim 66, wherein said particles comprises at least in part a biological group.

72. The platform of claim 36, wherein said particles comprises at least in part a chemical group.

73. The method of claim 66, wherein said particles comprise a polymerizing functional group.

74. The method of claim 73, wherein said polymerizing functional group can form a bond with a polymer, a monomer or another particle.

75. The method of claim 73, wherein said polymerizing functional group is selected from the group consisting of acrylics, methacrylics, vinylbenzyls, vinyls, epoxies, alpha/beta usaturated ketones, cinnamates, chalione groups.

76. The method of claim 36, wherein said at least one channel structure comprises open channels or closed channels, wells or chambers.

77. The method of claim 36, wherein at least a portion of said at least one channel structure is defined by said surface or covering structure.

78. The method of claim 36, wherein at least a portion of said channel structure is defined by said coating film

79. The method of claim 36, wherein said at least one channel structures forms at least one island.

80. The method of claim 36, wherein said at least one channel structure has a shape in cross section that is substantially square, oval, crescent, half-circle or rectangular.

81. The method of claim 36, wherein said at least one channel structure is linear, circular, coiled, curved, saw-toothed or switchback along at least a portion of its length.

82. The method of claim 36, wherein said channel structures are formed by removing unpolymerized or partially polymerized materials.

83. The method of claim 82, wherein said removing is by washing.

84. The method of claim 36, wherein said platform further comprising a magnetic element, an electromagnetic element, an acoustic element or a dielectric element.

85. A platform made by the method of claim 36.

86. The platform of claim 85, wherein said platform defines a chip or a microchip.

87. A method of separating moieties, comprising:

a) providing a platform of claim 1;

b) providing a sample containing moieties;

c) contacting said platform with said sample;

d) moving said sample through channels on said platform such that moieties within said sample are separated; and

e) optionally detected at least one moiety.

88. A method of performing a bioassay, comprising:

a) providing a platform of claim 1;

b) providing one or more reagents for use in said bioassay;

c) contacting said platform with said reagents;

d) moving said reagents through channels on said platform such that said reagents are contacted and a bioassay is performed; and

e) optionally detecting at least one reactant or product of said bioassay.

89. A method of performing a chemical reaction, comprising:

a) providing a platform of claim 1;

b) providing one or more reagents for use in said chemical reaction;

c) contacting said platform with said reagents;

d) moving said reagents through channels on said platform such that said reagents are contacted and a chemical reaction is performed; and

e) optionally detecting at least one reactant or product of said chemical reaction.

90. A method of performing high performance liquid chromatography; comprising:

a) providing a platform of claim 1;

b) injecting a sample into at least one channel structure on said platform;

c) performing high performance liquid chromatography using said at least one channel structure; and

d) optionally detecting a moiety separated by said high performance liquid chromatography.

91. A method for performing capillary electrophoresis, comprising:

a) providing a platform of claim 1;

b) injecting a sample into at least one channel structure on said platform;

c) performing capillary electrophoresis using said at least one channel structure; and

d) optionally detecting a moiety separated by said capillary electrophoresis.

92. A method for performing capillary electrochromatography, comprising:

a) providing a platform of claim 1;

b) injecting a sample into at least one channel structure on said platform;

c) performing capillary electrochromatography using said at least one channel structure; and

d) optionally detecting a moiety separated by said capillary electrochromatography.

93. A method for cell separating comprising:

a) providing a platform of claim 1;

b) introducing a sample having cells into at least one channel structure on said platform;

c) moving said sample or at least one component thereof through said at least one channel structure on said platform such that said cells within said sample are separated; and

d) optionally detecting said cells.

94. A method for capturing a cell comprising:

a) providing a platform of claim 1;

b) introducing a sample having cells into at least one channel structure on said platform;

c) moving said sample or at least one component thereof through said at least one channel structure on said platform such that said cells within said sample are captured; and

d) optionally detecting said cells.